ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems	)	CC Docket No. 94-102 RM-8143

To: The Commission

REPLY COMMENTS

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October 23, 1996

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REPLY COMMENTS

BellSouth Corporation ("BellSouth"), by its attorneys, hereby responds to comments submitted in response to the petitions for reconsideration of *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, *Report and Order and Further Notice of Proposed Rulemaking*, FCC 96-264 (July 26, 1996), *summarized* 61 Fed. Reg. 40348 (Aug. 2, 1996) ("*Report and Order*").

SUMMARY

BellSouth urges the Commission to grant its petition for reconsideration and clarify that wireless providers are not required to make 911 services available to non-service-initialized phones. Virtually all commenters opposed the imposition of such a requirement, which would not enable PSAPs to call-back callers from such phones. Moreover, the Commission should not require wireless subscribers to bear the costs associated with implementing and providing 911 and E911 services because most wireless 911 calls relate to general public safety issues rather than the personal safety of the caller. Finally, the Commission should not impose a deadline for implementing Phase II at this time. End-to-end solutions for providing detailed location information have not yet been developed and virtually every commenter maintained that the technology needed to comply with the rules was not yet available. Rather than implement an arbitrary deadline at this

time, the Commission should convene periodic industry meetings throughout the next couple of years to evaluate the status of end-to-end solutions. Only after such fora have been completed can the Commission impose a realistic deadline for providing detailed wireless ALI information to PSAPs.

I. IT IS PREMATURE TO REQUIRE WIRELESS CARRIERS TO PROVIDE PSAP'S CALL-BACK NUMBERS FOR NON-SERVICE-INITIALIZED HANDSETS

After issuance of the *Report and Order*, numerous parties requested that the Commission reconsider its decision. Of the parties addressing the requirement that wireless carriers provide PSAPs with call-back numbers from non-service-initialized handsets, virtually all (including BellSouth) urged the Commission to reconsider its decision.[1] These parties established that such a requirement undermines the central basis for this proceeding — the provision of accurate enhanced 911 services — because PSAPs will not be able to call-back most non-service-initialized handsets and the number of fraudulent and prank calls will increase.[2] In fact, no commenter supported this

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[1] *See* BellSouth Petition for Reconsideration, CC Docket No. 94-102, at 4-7 (Sept. 3, 1996) ("BellSouth Petition"); Ameritech Petition for Partial Reconsideration, CC Docket No. 94-102, at 7-8 (Sept. 3, 1996); AT&T Wireless Services, Inc. Petition for Reconsideration, CC Docket No. 94-102, at 5-6 (Sept. 3, 1996); Bell Atlantic NYNEX Mobile, Inc. Petition for Reconsideration, CC Docket No. 94-102, at 3-5 (Sept. 3, 1996); CTIA Petition for Reconsideration and Clarification, CC Docket No. 94-102, at 5-6 (Sept. 3, 1996); PCIA Petition for Reconsideration, CC Docket No. 94-102, at 7-9 (Sept. 3, 1996); Southwestern Bell Mobile Systems, Inc. Petition for Reconsideration, CC Docket No. 94-102, at 6-8 (Sept. 3, 1996) ("SBMS Petition"); Telecommunications Industry Association, Mobile and Personal Communications Division, Petition for Reconsideration and Clarifications, CC Docket No. 94-102, at 10-11 (Sept. 3, 1996) ("TIA Petition"); XYPOINT Corporation Petition for Reconsideration, CC Docket No. 94-102, at 3-4 (Sept. 3, 1996); *accord* Nextel Communications, Inc. Petition for Reconsideration, CC Docket No. 94-102, at 3-6; PrimeCo Personal Communications, L.P. Petition for Reconsideration, CC Docket No. 94-102, at 2-5 (noting that even the FCC has recognized that call-back features may not be usable).

[2] *See* Ameritech Petition at 7-8; AT&T Wireless Petition at 5-6; BellSouth Petition at 8-9; Bell Atlantic Petition at 3-7; CTIA Petition at 5-9; Nextel Petition at 6; PCIA Petition at 7-9; TIA Petition at 9-12; XYPOINT Petition at 4-5. *Accord* Comments of CTIA, CC Docket No. 94-102,

requirement when it was originally proposed.[3] Moreover, CTIA and three national public safety organizations developed a "Consensus Agreement" regarding how best to transition to an E911 wireless environment.[4] These parties determined that, from both the commercial wireless and public safety standpoints, 911 services should only be available from service-initialized handsets.[5] Even more recently, the New Jersey Office of Emergency Telecommunications Services opposed this requirement because it would increase prank calls and create a drain on its resources that would undermine the public interest.[6]

Despite the extensive record indicating that 911 services should not be offered to non-service-initialized handsets, the Commission opted to adopt just such a requirement.[7] Although the Commission's decision need not "be based on the majority of participating parties,"[8] it must be

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at 7 (Sept. 25, 1996). The New Jersey Office of Emergency Telecommunications Services ("NJOETS") opposes any proposal to allow non-service-initialized handsets access to 911 services for this very reason. NJOETS Comments, CC Docket No. 94-102, at 2 (Sept. 25, 1996).

[3] *See Report and Order* at ¶ 26. On October 27, 1995, the Ad Hoc Alliance for Public Access to 911 ("Alliance") filed a petition for rulemaking requesting that 911 service be provided to non-service-initialized handsets. All commenters opposed this proposal. The Commission noted that, since the close of this pleading cycle, only two other parties have supported this proposal. *See Report and Order* at ¶ 31.

[4] *See Report and Order* at ¶¶ 21-23.

[5] *See Report and Order* at ¶ 23.

[6] NJOETS Comments at 2.

[7] Notably, the Commission indicates that, of all the parties submitting comments in the proceeding, only three supported the provision of 911 service to non-service-initialized handsets. Moreover, as noted previously, no party supported this requirement when it was originally proposed by Alliance in October 1995.

[8] *See* Opposition of the Ad Hoc Alliance for 911 to the Petitions for Reconsideration, CC Docket No. 94-102, at 2 (Oct. 8, 1996) ("Alliance Opposition").

based on reasoned decision-making. Given that virtually all parties — including members of the wireless community, manufacturers, and public safety organizations — opposed mandating access to 911 services for non-service-initialized handsets, and that only three "public safety" groups, including an "ad hoc" group, firmly supported such a requirement, the record does not establish that the public interest would be served by such a requirement *at this time*.[9]

As one opponent to the petitions for reconsideration noted, BellSouth's "commitment to the goal of this docket cannot be doubted."[10] In this regard, BellSouth does not dispute that it may be possible *in the future*, either through infrastructure or CPE enhancements, to create unique call-back capabilities for non-service-initialized handsets. It is not possible, however, to do so today and it is unlikely that the capabilities can be developed, tested, and implemented prior to the mandated deadline. It is largely for these reasons that BellSouth urges the Commission to reconsider its decision to require covered wireless carriers to provide 911 capabilities to non-service-initialized wireless phones.

Alliance now claims that it has a solution to the call-back problem associated with non-service-initialized handsets.[11] This "solution," however, is fraught with problems and would result in significant confusion to the public. First, it would require manufacturers to install a unique pseudo-MIN, instead of the current practice of installing a "null" MIN, in *every* handset capable of

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[9] Alliance itself notes that "[i]n the case of a 'Non-Service Initialized' handset without a MIN at all, the PSAP can not call-back the handset as the PSAP has no dialable telephone number to call." Alliance Comments, CC Docket No. 94-102, Attachment E at 2 (Sept. 25, 1996) ("Alliance Further Comments"). As discussed below, Alliance's proposed solution to this problem is deficient in many respects.

[10] *See* Opposition of KSI Inc. and MULOC Inc. to Petitions for Reconsideration and Clarification, CC Docket No. 94-102, at 6 (Oct. 8, 1996).

[11] *See* Alliance Further Comments, at 9-10 & Attachment E.

being used on the system of a covered wireless provider.[12] Thus, each owner of a non-service-initialized handset would be required to retrofit its handset before Alliance's proposal could work. Also, such a requirement would be impractical unless administration of these non-null pseudo-MINs was governed by the North American Numbering Plan ("NANP"). This would require reservation of a large block of numbers from the NANP for use as pseudo-MINs for non-service-initialized handsets. Given the shortage of unused NPA-NXX codes in the NANP, this could be a major obstacle. If there is no coordination with the NANP and if manufacturers are not obliged to use non-overlapping codes from the NANP block, the inevitable result would be the same pseudo-MIN being inadvertently assigned by different manufacturers. This could result in ring-back to multiple handsets and the emergency caller never receiving the call from the PSAP.

Moreover, Alliance's proposal would require a major undertaking by MTSO vendors. Specifically, vendors would have to develop a special Visiting Location Register ("VLR") for assigning a temporary pseudo-ANI to a handset for the duration of a 911 call and some, yet to be determined, period after the call has been completed (for call-back purposes).[13] If such a VLR was developed, before a non-service-initialized handset could be called back by a PSAP, the MTSO would have to page all active non-service-initialized handsets in the area to differentiate between various MIN/ESN combinations in use in an effort to identify the 911 caller. Since this differentiation between MIN/ESN combinations cannot be accomplished by MTSOs, it is likely that

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[12] In other words, a number in the *form* of a MIN would be installed, but the phone would not actually be associated with the phone number that a MIN would otherwise represent.

[13] This VLR must be developed for all covered systems, whether cellular, PCS, or SMR, and must not hinder roaming between different types of CMRS systems.

multiple cellular units would receive a "call-back" from the PSAP.[14] Because the first user to answer the phone would be connected to the PSAP, the emergency caller may not receive the call-back.

Aside from the time and cost associated with developing and administering Alliance's "solution,"[15] fraudulent and cloned phones still would present a major problem. Because the new rules require covered wireless providers to supply call-back information without validation, a 911 call from a cloned phone will result in a call-back to both the cloned and legal phone. The confusion associated with such a result would increase the potential that the scarce resources of emergency personnel will be wasted.

II. THE COSTS ASSOCIATED WITH UPGRADING LEC NETWORKS TO ACCOMMODATE THE PROVISION OF WIRELESS E911 SERVICES SHOULD NOT BE BORNE BY WIRELESS SUBSCRIBERS ALONE

BellSouth disagrees with the two parties who claim that costs associated with upgrading LEC systems to accommodate the provision of wireless E911 services either should be absorbed by

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[14] Assuming that manufacturers are not required to assigned unique MINs to every handset or that, even if such a requirement was imposed, all handsets had not been retrofitted, every handset with the same MIN would be called. Although Alliance claims in its Opposition that 911 calls from a handset with a common MIN will not be routed to the wrong party, it elsewhere acknowledges that this is precisely what would happen. *Compare* Alliance Opposition at 8 ("CTIA claims that, if [a MIN] is also in use by another subscriber, 'there is a very real likelihood that the call-back will be directed to the subscriber, who will know nothing about the call.' This is also not true."), ***with*** Alliance Further Comments, Attachment E, at 1 ("In the case of a 'Non-Subscriber' handset with a Mobile Identity Number (MIN) that is no longer valid for that handset Electronic Serial Number (ESN), the home system for the MIN will not steer the call to this 'non-paying' handset. The call-back will be steered to the handset currently assigned this MIN and should that customer answer, they will have no knowledge of the 911 call.").

[15] The costs associated with developing this VLR, as well as a mechanism for identifying the 911 caller from among all non-service-initialized handsets in the area with the same MIN, would likely exceed the costs "estimated" by Alliance. Moreover, Alliance provides no support for the "estimated" costs associated with its "solution." *See* Alliance Opposition, Attachment E.

wireless customers or should be handled through individual negotiations with LECs and state public utility commissions.[16] Because the Commission's rules mandate the provision of 911 services to non-service-initialized handsets, wireless subscribers should not be forced to bear the burden of the costs associated with upgrading LEC and wireless networks to comply with the new E911 requirements. 911 services are used to notify emergency personnel when "public safety" is at risk. Wireless callers often use 911 to notify authorities about accidents, fires, dangerous drivers, and crimes that have no direct impact on the caller's safety but, rather, improve overall public safety. In this regard, the costs associated with implementing the Commission's wireless E911 requirements should be borne equally among wireline and wireless subscribers. Accordingly, a cost recovery mechanism must be established that reimburses carriers for the costs associated with implementing and providing 911 services in the same manner, regardless of whether the carrier provides wireline or wireless services.

Moreover, one of the principle goals of the Telecommunications Act of 1996 was to encourage direct competition between wireless and wireline systems for customers. The price associated with implementing the Commission's rules would place wireless providers at a competitive disadvantage, however, with respect to wireline carriers if a uniform cost recovery mechanism is not adopted. As PCIA has noted:

> because of the complexity, and therefore the high cost, of giving the same degree of location reliability for wireless as is available from wireline

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[16] City Of Chicago Response to Petitions for Reconsideration, CC Docket No. 94-102, at 2-3 (Oct. 8, 1996); Texas Attorney General Opposition and Response to Petitions for Reconsideration, CC Docket No. 94-102, at 8 (Oct. 7, 1996).

> systems, the public safety industry might have to assess wireless customers five to ten times the typical wireline "911" surcharge or tax.[17]

Similarly, the New Jersey Office of Emergency Telecommunications Services has stated that the cost of upgrading wireless facilities to comply with the Commission's requirements will be "more than New Jersey paid for its entire statewide enhanced wireline 9-1-1 service *including start-up cost and fifteen years of prepaid service*."[18] Accordingly, the Commission should ensure that wireless and wireline providers are treated equitably with regard to recovering the costs associated with implementing and providing 911 and E911 services.

III. IT IS PREMATURE TO ESTABLISH A DEADLINE FOR COMPLETING PHASE II

BellSouth and others have urged the Commission to reconsider its Phase II implementation deadline because it is unlikely that the technology will be readily available in time to ensure compliance with the deadline.[19] KSI, Inc. and MULOC, Inc. (collectively "KSI"), the developer and owner respectively of a location-determination technology, takes issue with these claims and maintains that the Phase II deadline is realistic. Although KSI supports the Phase II deadline because it is "technically feasible," it concedes that "no entity can 'guarantee' the exact future date of their commercial availability."[20] Moreover, virtually every other manufacturer/developer commenting in the proceeding states that the deadline is excessively optimistic.[21]

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17 Comments of PCIA, CC Docket No. 94-102, at 6 (Sept. 25, 1996).

18 NJOETS Comments at 3 (emphasis added).

19 *See, e.g.*, BellSouth Petition at 10; Nokia Petition at 3; PCIA Petition at 12.

20 KSI Opposition at 3.

21 Although KSI "claims" that "others have well established the accuracy and viability of location technology *today*," it cites to no other commenters. *Compare* KSI Opposition at 4 *with* TIA

Even assuming that KSI is correct, and conversely that all major manufacturers are incorrect, that location technology capable of satisfying the Commission's rules currently exists, the "availability" of the technology is only the first step in meeting the Phase II deadline.[22] Once the technology is available, it must be implemented into an "end-to-end" system capable of making the wireless 911 ALI data specified by the rules available to all requesting PSAPs.[23] In order to create such an end-to-end system, data flows, call routing procedures, and PSAP and LEC interfaces must be developed. As stated in BellSouth's petition, "it is unlikely that end-to-end solutions will exist for real world trial and evaluation *until 1998, at the earliest.*"[24]

Moreover, regardless of how good KSI's technology may be, it cannot even be *part* of an end-to-end solution until it coordinates with 911 database vendors, wireless switch vendors, LEC infrastructure providers, PSAPs, and wireless providers. BellSouth attempted to facilitate this coordination through the request for information referenced in its petition[25] but KSI "felt it was inappropriate to provide BellSouth with a detailed description of planned innovations at this point."[26] Thus, BellSouth still is not sure how KSI's developments would be utilized in an end-to-end

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Petition at 16-17; Motorola Letter Clarifying its Comments, CC Docket No. 94-102, at 1 (Sept. 3, 1996); Nokia Comments, CC Docket No. 94-102, at 2 (Sept. 25, 1996); Ericsson Comments, CC Docket No. 94-102, at 4 & n.2 (Sept. 25, 1996).

[22] BellSouth recognizes that numerous vendors are actively working on developing location technologies and that technologies capable of complying with the Commission's Phase II deadline may be available in the next year to eighteen months.

[23] An end-to-end solution would provide for generation of ALI coupled with standardized data flows, selective routers, database management, mapping, and satisfaction of PSAP requirements.

[24] BellSouth Petition at 11 (emphasis added).

[25] BellSouth Petition at 10-12.

[26] KSI Opposition at 5.

solution. Until KSI and other location technology suppliers assist wireless providers and other vendors in the creation of an end-to-end solution, the purported accuracy of its technology is irrelevant because technology alone will not satisfy the Phase II deadline.

BellSouth remains committed to developing an end-to-end solution to providing detailed ALI information. Although many 911 location trials are underway for analog cellular systems, such trials represent only the first step toward commercial deployment. Other trials are necessary to ensure that ALI information may be passed over digital cellular and other CMRS systems, which could represent well over half of all wireless subscribers by the Phase II deadline. BellSouth supports adoption of "Phase II" requirements, but only after end-to-end solutions have been developed. No commenter has claimed that such solutions will not be developed, the only question is when. Given the importance of E911 matters, long-term viable solutions should be developed rather than patchwork interim solutions (with questionable accuracy) created to meet some arbitrary deadline. Accordingly, the Commission should eliminate the current five-year Phase II deadline in favor of convening periodic industry meetings throughout the next couple of years to evaluate the status of end-to-end solutions.[27] Only after such fora have been completed can the Commission impose a realistic deadline for providing detailed wireless ALI information to PSAPs.

CONCLUSION

For the forgoing reasons, BellSouth urges the Commission to grant its petition for reconsideration and clarify that wireless providers are not required to provide call-back information to PSAPs with regard to calls made from non-service-initialized phones. Moreover, the Commission should eliminate its requirement to provide wireless location information within five years, as well

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[27] *See* BellSouth Petition at 11-12.

as the requirement that wireless providers pass both ANI and pseudo-ANI before standards necessary for the passage of such information have been developed.

Respectfully submitted,
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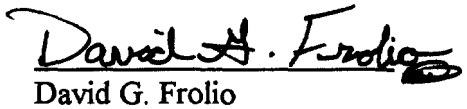

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CERTIFICATE OF SERVICE

I, Phyllis Martin, hereby certify that copies of the foregoing Reply Comments of BellSouth in CC Docket 94-102 were served via first class U.S. mail, postage prepaid, this 23rd day of October, 1996, to the following parties:

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